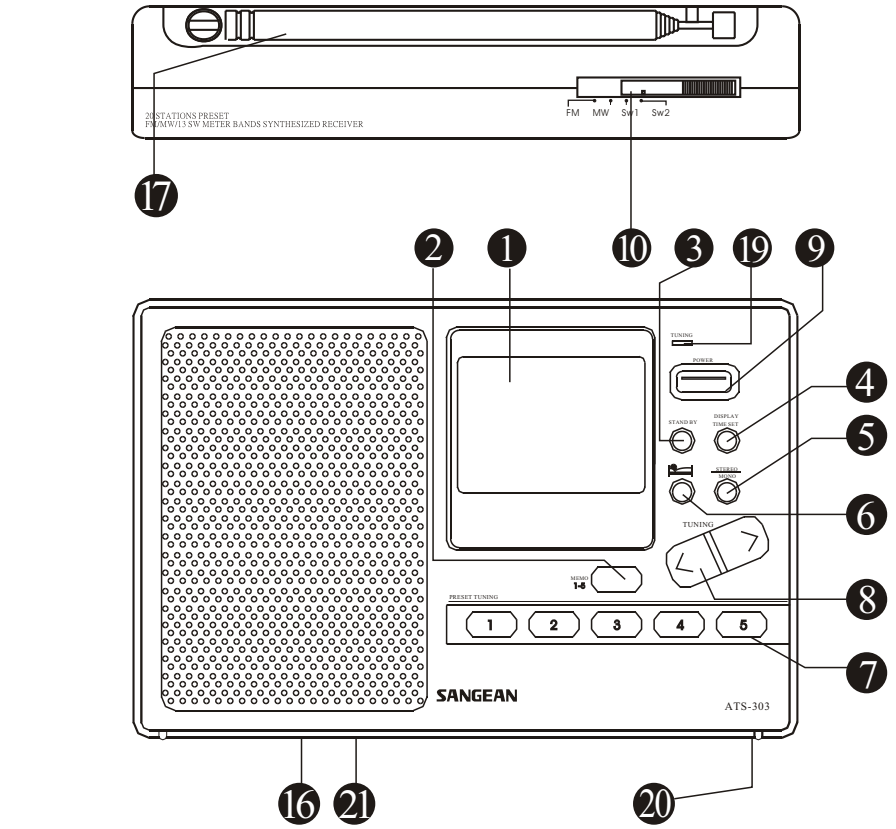
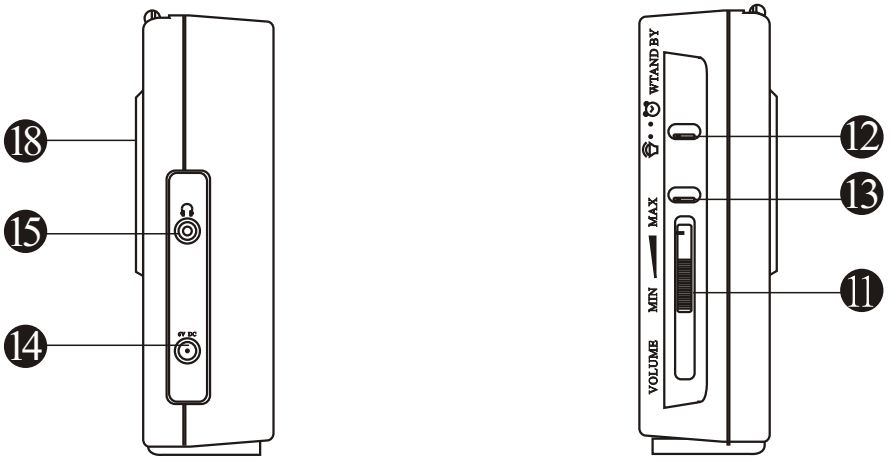
SANGEAN

ATS-303

SW1 2.3 - 7.3 MHz
SW2 9.5 - 26.1 MHz
9:36
TUNING
POWER
STAND BY
DISPLAY
TIME SET
10-90
STEREO
MONO
TUNING
SW METER BAND
120m 90m 75m 60m 49m 41m 31m
2 300 3 200 3 900 4 750 5 950 7 100 9 500
2 495 3 400 4 000 5 060 6 200 7 300 9 900
25m 21m 19m 16m 13m 11m METER
11 65 13 60 15 10 17 55 21 45 25 67
12 05 13 80 15 60 17 90 21 85 26.10 MHz
20 station presets
FM STEREO/
MW/13 SW
Large LCD display
13 SW meter bands
Adjustable sleep timer
PLL WORLD BANDS RECEIVER
PRESET TUNING
MEMO
1-5
SANGEAN
FM / MW / 13 SW METER BANDS SYNTHESIZED RECEIVER
ATS 303


20STATIONS PRESET
FM/MW/13 SW METER BANDS SYNTHESIZED RECEIVER
FM MW Sw1 Sw2
17
2 1 10 3 19 9
TUNING
POWER
4
STAND BY
DISPLAY
TIME SET
5
STEREO
MONO
6
TUNING
8
MEMO
1-5
PRESET TUNING
1 2 3 4 5
7
SANGEAN
ATS-303
16 21 20


18
15
14
6V DC
WTAND BY
12
13
MAX
MIN
11
VOLUME

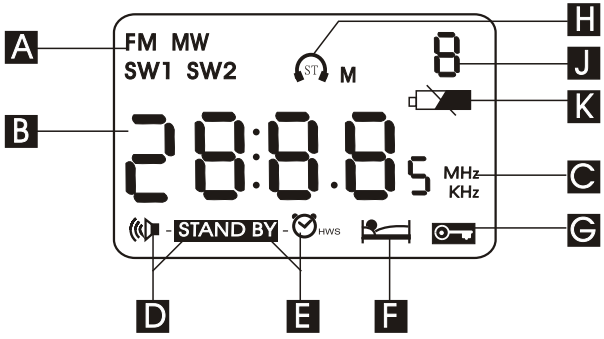
Elements of operation

❶	LCD DISPLAY	Frequency, time and function displays
❷	MEMO1-5	Entering commands
❸	STAND BY	Alarm standby
❹	DISPLAY TIME SET	Time display and time input
❺	STEREO/MONO	Switching from Stereo/Mono
❻	10-90	Sleep
❼	PRESET TUNING 1-5	Station keys
❽	TUNING< >	Setting stations manually Automatic station search Entering clock time and alarm time
❾	POWER	On/off key,Switching off the alarm and the sleep function
❿	FM/MW/SW1/SW2	Frequency range key
⓫	VOLUME MIN MAX	Volume
⓬	STAND BY	Radio alarm or beeper alarm
⓭		Locking key for locking the operation setting
⓮	6V DC	Socket for an external mains-supply-unit
⓯		Stereo headphone socket
⓰		Battery compartment
⓱		Telescopic antenna
⓲		Stand
⓳	TUNING	Tuning display

⓴	SW FREQ	Switching over the automatic tuner
	METER	Searching through the SW metric channels
	FULL	Searching through all frequencies
㉑	9K/10K	Tuning steps 9kHz/10kHz

Displays

A	Selecting a frequency range
B	Frequency and time displays
C	kHz for MW/MHz for FM and SW
D	Radio alarm
E	HWS beeper alarm
F	Sleep
G	Mode of operation locked
H	FM stereo (only with headphones)
J	Memory slots 1-5
K	Battery condition

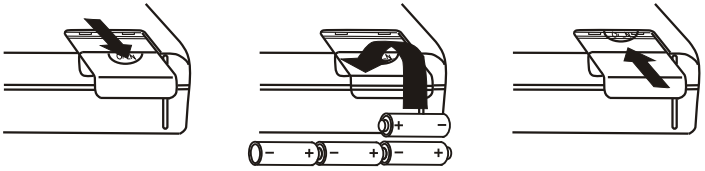


Power supply

This appliance can be operated with:
4 Mignon batteries 1.5 Volt,Type IEC R6/UM3/AA or

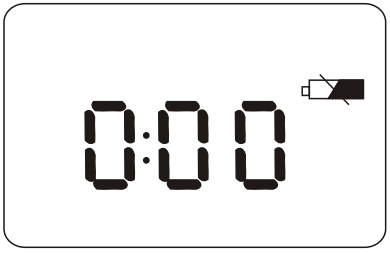
Changing the batteries

Open the battery compartment by pressing on the finger groove on the lid of the battery compartmint ⑯ and pulling it down.lnsert4, 1.5 Volt Mignon-batteries taking care that the polarity of the batteries corresponds with that shown next to the battery compartment.



Slide the lid of the battery compratment back until it clicks into place.

The battery symbol K blinks when the batteries are empty.The changing of the batteries must not take more than three minutes so that the stored values(time/alarm time/station keys)are not lost.



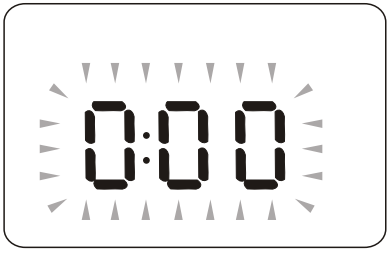
Remove exhausted batteries from the appliance immediately to avoid their leaking into the appliance.
Batteries are also to be removed when not using the appliance for longer periods of time.

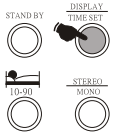
Setting the clock

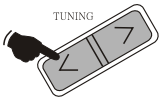
In accordance with the world standard,the time is displayed on a 24 hour basis(Greenwich mean time).

The clock is ready for operation after four 1.5 volt Mignon batteries have been inserted into the battery compartment.

Press the DISPLAY/TIME SET key ❹ a little longer than half a second.0:00 blinks in the display.

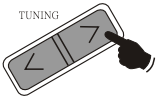


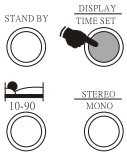




Enter the time using the TUNING keys ⑧ while the display is binking.

The < key adjusts the hours and the > key adjusts the minutes.



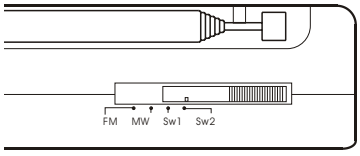


To start the time display press DISPLAY/TIME SET ④ once again.

If DISPLAY/TIME SET ④ is not pressed after entering the time,the time you have set becomes valid automatically after approx.5 seconds.

By opening the stand ⑱ the appliance can be operated on a slant.

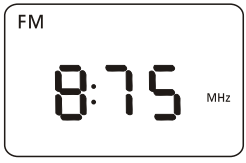
Selecting a frequency range

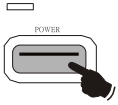


The selection of a frequency range is made using the frequency range switch ⑩ FM/MW/SW1/SW2 while this is shown in the display.

Channel	Frequency range	Wavelength
FM	87.5-108MHz	FM
MW	522-1620kHz	Medium wave with 9 kHz tuning steps
MW	520-1710kHz	Medium wave with 10 kHz tuning steps
SW1	2.3-7.3MHz	Short wave 120-41m
Sw2	9.5-26.1MHz	Short wave 31-11m

After switching on the appliance using the POWER key ❾ ,the frequency range and frequency which were last used are shown in the display.After switching the wave range switch,the channel and frequency selected appear in the display.





SW frequency (switching over the automatic tuner)

The station search in the SW range can be altered as a basic setting using the SW FREQ:METER/FULL switch ⓴.

You can choose between:

METER = search the SW metric channels.

FULL = search all frequencies,including those outside the SW metric channels.

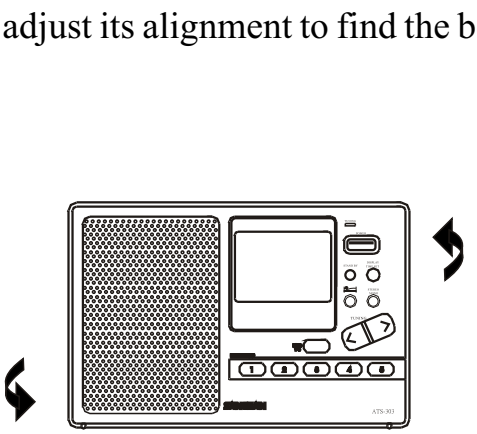
To make this choice,the SW FREQ:METER/FULL switch ⑳ has to be moved using a small screwdriver or similar instrument.

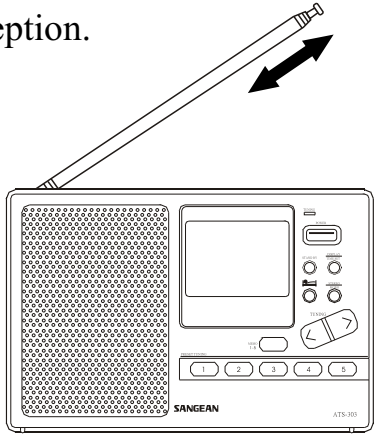
Important note:
The SW FREO: METER/FULL switch ⑳ also has a RESET function. After switching over switch ⑳ and then switching the appliance off and on, all of the stored values are erased.
Therefore, switch ⑳ should be set before setting the time and the alarm or programming the station keys.

In-built antennae

The in-built ferrite antenna ensures high quality reception in the MW range.By adjusting the position of the appliance the best reception quality can be found.

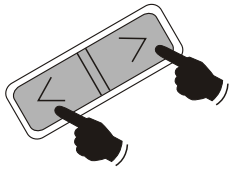
The telescopic antenna ⑰ is for FM and SW reception.Extend it and adjust its alignment to find the best reception.





Manual tuning

Switch the appliance on,select a wave range and find your desired station by pressing the TUNING ❽ keys repeatedly.The perfect setting and the strength of the reception of the station is shown by the signal lamp ⓳ TUNING.



By pressing and holding one of the keys ❽ ,you can manually tune up to a desired frequency display.

The tuning process takes place as follows:

FM	100 kHz
MW	9 kHz or 10 kHz*
SW1/SW2	5 kHz

* Europe 9 kHz /USA and Canada 10 kHz

MW tuning grid

The tuning grid for the medium wave can be adjusted to 9 kHz or 10 kHz using the 9K/10K Switch ㉑ inside the battery compartment.

This switch can be found inside the battery compartment and must be moved using a small screwdriver or similar instrument.

Automatic station search

If one of the TUNING keys ❽ is pressed for longer than half a second,the station search is triggered.The key pressed is to be released after the station search has begun. As soon as a station is found which good quality reception the station search stops antomatically.

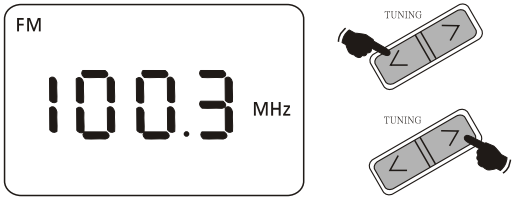
The search can be stopped by once again briefly pressing the key ❽ which started the station search or with the key for the opposite direction.

Station memory FM/MW/SW1/SW2 (PRESET TUNING)

20 different stations can be stored in total. 5 short wave stations from SW1 and SW2 and 5 from the MW and from FM ranges respectively.

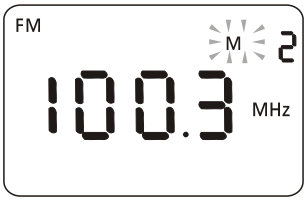
The station you wish to store can be set according to any of the tuning methods described.

Storing stations



Switch the appliance on,select a wave range from which a station is to be stored at one of the station keys ❼ PRESET TUNING 1-5.

As soon as the station has been selected, press the MEMO key ❷ 1-5.M blinks for approx.3 seconds in the display ❶ .



During this time,press the station key 7 PRESET TUNING 1-5 at which you wish to store the station.

Then press the MEMO key ❷ 1-5 once again.

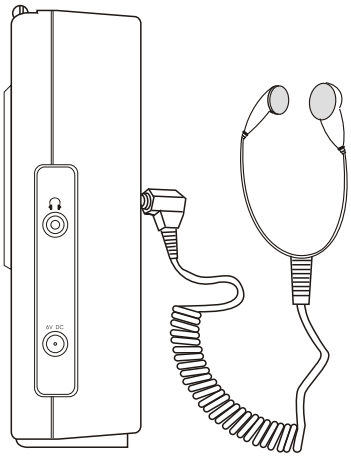
The selected station is now stored at the desired station key.

To call up a desired station, all you have to do is select the wave range and press the appropriate station key.

Another station can be stored at a station key which has already been programmed by using the above method.

Stereo reception with headphone

This appliance is suitable for the reception of FM stereo stations which can be heard with a very high sound quality using earphones or headphones.



The socket for the headphones ⓯ , which is suitable for a cinch plug of 3.5mm diameter, is marked with the headphone symbol.

The in-built loudspeaker switches off automatically and the appliance is now ready to receive stereo stations.

Slide the STEREO/MONO switch ❺ to STEREO.
The symbol 🎧 / H appears in the display.
This reception option is only available with ear or headphones.

Volume

The volume can be controlled with the volume dial(VOLUME)⓫ .
Take care that the volume is kept low when using earphones and that is has the desired level when you wish to be woken with the radio alarm.

Using the operational lock

With switch⓭with the key symbol,the operating setting of the appliance can be locked .The appliance is thus protected against unintentional operating functions, accidental readjustment of station settings or undesired ON/OFF functions.

When the lock in operation, a key appears in the display.

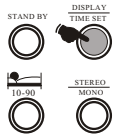
The operational lock is on when switch is under the key symbol.

The On/OFF switch and all tuning options are not functional. lt is not possible to switch the appliance on until the operational lock has been deactivated.When the machine is switched off, the operational lock ensures that the machine is not turned on accidentally, for example when being transported in a suitcase or bag.

To release the lock, move the switch ⓭ down.

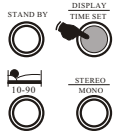
Setting the alarm function

The alarm time should be set when the radio is not on. The correct alarm time is dependent on the correct setting of the clock (see section " Setting the clock").

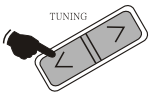


Press key ❹ DISPLAY TIME SET briefly and release it immediately.

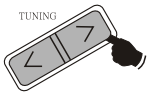
Either / Ⓓ STANDBY or / Ⓔ STANDBY appears for approx.5 seconds in the display depending on the position of switch ⓬ STAND BY.



While the STANDBY display is blinking, press key ❹ DISPLAY TIME SET once again and hold it until the digits in the time display also blink.

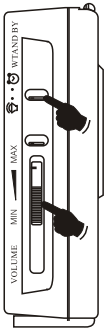


Now you can set the desired alarm time with the TUNING keys ❽ ,with the same procedure as when setting the time.
The < key sets the hours and the > key sets the minutes.



After entering the alarm time, the normal time display returns afte approx. 5 seconds and the alarm time entered is valid.

Radio alarm

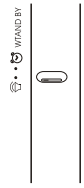


To be woken by the radio, slide The STAND BY switch ⓬ to the loudspeaker symbol which then also appears in the display.

Take care that the volume of the radio station is loud enough to wake you up.

During the alarm process the symbol / F blinks in the display.

HWS beeper alarm



To be woken by the HWS beeper. slide the STAND BY switch⓬ to the alarm symbol which then also appears in the display.

The HWS beeper begins quietly and becomes progressively louder to wake you up. During the alarm process the symbol / F blinks in the display.

Checking the alarm time

To check the alarm time, press DISPLAY TIME SET ❹ briefly.The normal time display reappears in the display.

Switching off the alarm

The alarm radio or HWS beeper is switched off with the STAND BY key ❸ or POWER ❾ .

If the radio or HWS beeper is not switched off, the appliance remains in operation for approx,1 hour before switching off automatically.

Switching off the alarm clock

If you wish to switch the alarm off entirely, press the STAND BY key ❸ , The symbol / D or / E disappears from the display. The alarm time entered remains in the memory.
If you wish to switch the alarm clock back on, simply press STAND BY ❸ once again.

Sleep

When the key ⑥ 10-90 is pressed, the appliance is switched on automatically and the playing time of 90 minutes is selected. So you can fall asleep while listening to the radio, knowing it will switch itself off.

The appliance switches itself off after the selected time is over. The duration of play can be selected in 10 minute steps between 10 and 90 minutes by holding key ⑥ 10-90. The symbol / F appears in the display.

Specifications

Wave ranges	FM	87.5-108MHz
	MW	522-1620kHz
		9kHz tuning steps
	MW	520-1710kHz
		10 kHz tuning steps
	SW1	2.3-7.3MHz
	SW2	9.5-26.1MHz
Batteries		4 x 1.5 Volt Mignon
Ext. power supply		Mains supply unit 6 Volt/Interior minus pole
Dimensions(WxHxD)		16.5 x 11.0 x 3.5cm
Weight in kg		0.430